CLAIMS

What is claimed is:

1. A stereoscopic format conversion system comprising:

    a plurality of front end processing systems;

    a 3D data formatter for performing real-time conversion of one of a plurality of input 3D formats to one of a plurality of output 3D formats;

    a plurality of back-end processors; and

    a control system.

2. A method of performing stereoscopic format conversion comprising:

    inputting a 3D data stream from one or more of a plurality of 3D formats;

    processing said 3D data;

    performing real time 3D data format conversion to produce format converted data;

    processing said format converted data for outputting to produce a converted 3D data stream; and

    outputting converted 3D data stream.

3. A stereoscopic format conversion system comprising:

    a front end processing system and a front end expansion port;

    a 3D data formatter for performing real-time conversion of one of a plurality of input 3D formats to one of a plurality of output 3D formats;

    a back-end processor and a back end expansion port; and

    a control system.

4. A method of performing stereoscopic format conversion comprising:

inputting a 3D data stream from a plurality of 3D formats;

processing said 3D data stream at a front end processor or a processor added to a front end expansion port;

performing real time 3D data format conversion to produce format converted data;

processing said format converted data to produce a converted 3D data stream for outputting at a back end processor or a processor added to a back end expansion port; and

outputting converted 3D data stream, wherein said stereoscopic format conversion method performs conversion of a plurality of 3D formats to any one of said plurality of said 3D formats.

5. A stereoscopic format conversion system comprising:

a front end processing system;

a 3D data formatter for performing real-time conversion of one of a plurality of input 3D formats to one of a plurality of output 3D formats;

a back-end processor; and

a control system,

wherein the 3D data formatter converts stereoscopic video and performs a real time function selected from the group consisting of stereoscopic image pan, alignment, crop, zoom, keystone correction, aspect ratio conversion, linear scaling, non-linear scaling, scan-rate conversion, and any combination comprising at least one of the foregoing functions.

6. A stereoscopic format conversion system comprising:

a front end processing system for processing from one or more of plural 3D input formats;

a 3D data formatter for performing real-time conversion of one of a plurality of input 3D formats to one of a plurality of output 3D formats;

a back-end processor for processing to one or more of plural 3D output formats; and

a control system,

wherein the one or more 3D input formats and the one or more 3D output formats may be independently selected from the group of formats consisting of standard 2D; dual-channel; field-sequential; frame-sequential (page-flipped); over-under; row-interleaved; side-by-side; column-interleaved, spectrally multiplexed, and combinations comprising at least one of the foregoing formats.